

SH-PTP2 (phospho Tyr542) Polyclonal Antibody

Catalog No: YP0581

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: SH-PTP2

Fields: >>Ras signaling pathway;>>Phospholipase D signaling pathway;>>Axon

guidance;>>C-type lectin receptor signaling pathway;>>JAK-STAT signaling pathway;>>Natural killer cell mediated cytotoxicity;>>Leukocyte transendothelial

migration;>>Neurotrophin signaling pathway;>>Adipocytokine signaling pathway;>>Insulin resistance;>>Epithelial cell signaling in Helicobacter pylori infection;>>Pathogenic Escherichia coli infection;>>Herpes simplex virus 1 infection;>>Proteoglycans in cancer;>>Chemical carcinogenesis - reactive oxygen species;>>Renal cell carcinoma;>>Chronic myeloid leukemia;>>PD-L1

expression and PD-1 checkpoint pathway in cancer

Gene Name: PTPN11

Protein Name: Tyrosine-protein phosphatase non-receptor type 11

Q06124

P35235

Human Gene Id: 5781

Human Swiss Prot

No:

Mouse Gene Id: 19247

Mouse Swiss Prot

No:

Rat Gene ld: 25622

Rat Swiss Prot No: P41499

Immunogen: The antiserum was produced against synthesized peptide derived from human

SHP-2 around the phosphorylation site of Tyr542. AA range:508-557

Specificity: Phospho-SH-PTP2 (Y542) Polyclonal Antibody detects endogenous levels of

SH-PTP2 protein only when phosphorylated at Y542.



Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. Formulation:

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 70kD

Insulin Receptor; B Cell Receptor; MAPK; Protein_Acetylation **Cell Pathway:**

Background: The protein encoded by this gene is a member of the protein tyrosine

> phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP contains two tandem Src homology-2 domains, which function as phospho-tyrosine binding domains and mediate the interaction of this PTP with its substrates. This PTP is widely expressed in most tissues and plays a regulatory role in various cell signaling events that are important for a diversity of cell functions, such as mitogenic activation, metabolic control, transcription regulation, and cell migration.

> Mutations in this gene are a cause of Noonan syndrome as well as acute myeloid

leukemia. [provided by RefSeq, Aug 2016],

Function: catalytic activity:Protein tyrosine phosphate + H(2)O = protein tyrosine +

> phosphate., disease: Defects in PTPN11 are a cause of juvenile myelomonocytic leukemia (JMML) [MIM:607785]. JMML is a pediatric myelodysplastic syndrome that constitutes approximately 30% of childhood cases of myelodysplastic syndrome (MDS) and 2% of leukemia. It is characterized by leukocytosis with tissue infiltration and in vitro hypersensitivity of myeloid progenitors to granulocytemacrophage colony stimulating factor., disease: Defects in PTPN11 are a cause of Noonan-like syndrome [MIM:163955]; also known as Noonan-like/multiple giant cell lesion syndrome. It is an autosomal dominant disorder characterized by

Noonan features associates with giant cell lesions of bone and soft

tissue...disease:Defects in PTPN11 are the cause of LEOPARD syndrome [MIM:151100]. It is an autosomal dominant disorder allelic with Noonan

Subcellular Location:

Cytoplasm . Nucleus .

Expression: Widely expressed, with highest levels in heart, brain, and skeletal muscle.

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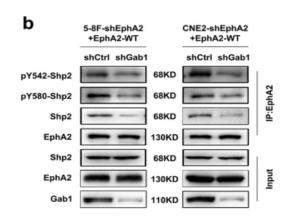


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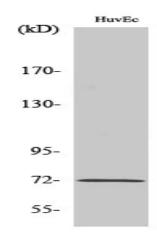
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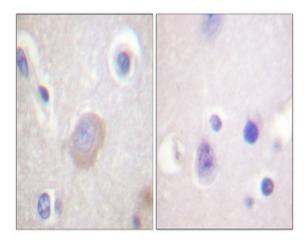
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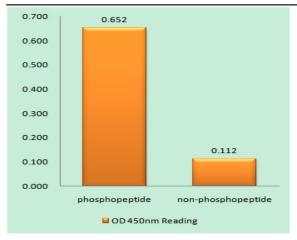
Xiang, YP., Xiao, T., Li, QG. et al. Y772 phosphorylation of EphA2 is responsible for EphA2-dependent NPC nasopharyngeal carcinoma growth by Shp2/Erk-1/2 signaling pathway. Cell Death Dis 11, 709 (2020).



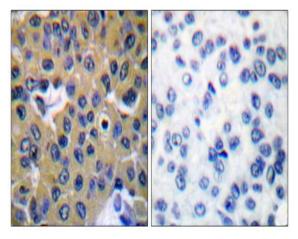
Western Blot analysis of various cells using Phospho-SH-PTP2 (Y542) Polyclonal Antibody diluted at 1:1000



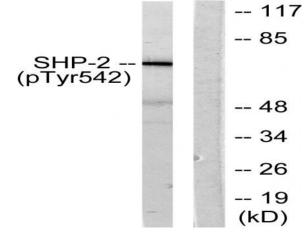
Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



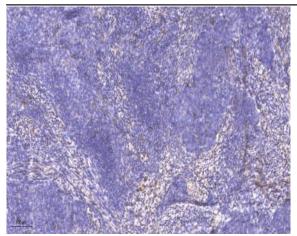
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using SHP-2 (Phospho-Tyr542) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using SHP-2 (Phospho-Tyr542) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from A431 cells, using SHP-2 (Phospho-Tyr542) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human cervical carcinoma. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).